SECRET

No 1

ECONOMIC INTELLIGENCE REPORT

COASTAL SHIPPING IN COMMUNIST CHINA 1950-57

CIA/RR 149
30 September 1958

CENTRAL INTELLIGENCE AGENCY

OFFICE OF RESEARCH AND REPORTS

SECRET

WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

Declassified in Part - Sanitized Copy Approved for Release 2013/08/26 :
CIA-RDP79R01141A001200070002-8

S-E-C-R-E-T

ECONOMIC INTELLIGENCE REPORT

COASTAL SHIPPING IN COMMUNIST CHINA 1950-57

CIA/RR 149

(ORR Project 43.2007)

CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

S-E-C-R-E-T

Declassified in Part - Sanitized Copy Approved for Release 2013/08/26 :
CIA-RDP79R01141A001200070002-8

50X1

FOREWORD

The purpose of this report is to present (1) an analysis of [redacted] 50X1
[redacted] coastal shipping in Communist China and [redacted] esti- 50X1
mates of the size, character, and employment of coastal shipping, with special reference to its ability to serve the transportation requirements of the economy. [redacted]

[redacted]

This report has been coordinated with all appropriate branches in this Office but not with other IAC agencies.

50X1

50X1

CONTENTS

Appendixes

Tables

Map

COASTAL SHIPPING IN COMMUNIST CHINA*
1950-57

Summary

Domestic coastal shipping (as distinguished from international maritime shipping and inland water shipping) is an important part of the transportation system of Communist China although it handles a relatively small proportion of all traffic. The railroads, the major carrier in China, already are working at near capacity and would find it difficult to handle also the traffic carried by coastal shipping.

The modern coastal fleet serves for the long-distance transportation of passengers, bulk cargoes, and bulky finished products, whereas short-distance transportation of agricultural and construction materials in feeder and local service is handled primarily by the primitive fleet.** In 1957, modern coastal shipping is estimated to have accounted for 13.9 million tons*** originated and 11.1 billion ton-kilometers (tkm), 3.2 percent and 6.7 percent, respectively, of the total performance by all forms of modern transport in Communist China.

The Chinese Communist modern coastal fleet is estimated to contain 89 vessels**** totaling 205,316 gross register tons (GRT) as of the end of 1957 compared with 41 vessels totaling 102,867 GRT in mid-1950. This total tonnage may be compared to the fleet of India, which had approximately 83 vessels totaling 247,000 GRT engaged in domestic coastal shipping and trade with nearby countries, excluding the vessels engaged in overseas maritime trade.

---

* The estimates and conclusions contained in this report represent the best judgment of this Office as of 10 June 1958.

** The terms modern and primitive are adopted for the purpose of this report to overcome the inconsistency of Chinese Communist terminology. The modern fleet consists of motorized, self-propelled vessels and such non-self-propelled craft as barges which are used with them. The primitive fleet consists of junks and other wooden sailing vessels. It is not clear whether the Chinese regard motorized junks as belonging to the modern or primitive fleets.

*** Tonnages are given in metric tons throughout this report unless otherwise indicated.

**** Vessels of 1,000 GRT and above.

The reasons for the impressive growth of coastal shipping in Communist China include the expansion of the Chinese economy, the increase in the size of the fleet, greater efficiency in the use of vessels, and a reduction in freight rates. The development of coastal shipping, however, has received less attention than the expansion of inland transport, particularly land transport for international trade with the Soviet Bloc.

Coastal shipping service for Communist China is provided by Chinese, British, and Soviet vessels. Until mid-1956, only Chinese and British vessels were employed regularly. These vessels were able to handle all cargoes offered for transport except during the periods of heaviest traffic. Since mid-1956, however, Soviet vessels also have been employed regularly in coastal service along the north coast. These vessels, along with the British vessels, provide a valuable supplement to the Chinese fleets. In 1957 the Soviet vessels carried about twice as much cargo as did British vessels.

The threat of interference from the Chinese Nationalists in the region of the Taiwan Strait has caused the division of Chinese Communist shipping into two separate units. The larger unit operates north of the Taiwan Strait. British vessels, not subject to Chinese Nationalist interdiction, provide the link between the two units and occasionally serve other coastal areas. The Chinese Communists may be less dependent on British shipping now except in the region of the Taiwan Strait. In 1956, there was a corresponding decrease in cargo carried by British vessels and an increase in cargo carried by Chinese vessels between Canton (Kuang-chou) and Swatow (Shan-t'ou). There was no increase in the number of British vessels in the coastal service in 1957, although there was an increase in the number of Soviet vessels. These developments may indicate a shift away from the use of British vessels in coastal service except in the region of the Taiwan Strait.

The seaborne, offshore international trade of Communist China continues to be served almost exclusively by foreign vessels. In November 1957, however, a scheduled service connecting Canton, Hong Kong, and Haiphong was established with Chinese vessels. This development may indicate an intention on the part of the Chinese to establish a small international shipping service to other ports in Southeast Asia.

The expansion of the Chinese Communist fleet has depended primarily on new construction in foreign shipyards, and Poland has been the principal source. Under the Second Five Year Plan (1958-62), however, it is expected that more attention will be given to domestic shipbuilding. A plea for such a move was made at the National Peoples Congress in 1957, and [redacted] the Chinese are embarking on an extensive long-range program of domestic shipbuilding 50X1

even though the cost of shipbuilding in domestic yards appears to be relatively high. The material and technical aid in shipbuilding received from the USSR will facilitate the expansion of the fleet. No indication of the total tonnage to be added to the coastal fleet during the Second Five Year Plan has been given, but by 1962 the total tonnage of the fleet probably will be only about one-half that of the Nationalist fleet in 1949. There is no evidence that the Chinese Communists intend to take advantage of the currently depressed condition of world shipping by attempting to charter or purchase laid-up vessels in the Free World.

I. Introduction.

Water transport may be divided into three basic sectors: inland water shipping, domestic coastal shipping, and international maritime shipping. This report is concerned with the domestic coastal shipping of Communist China. In most countries the division among these sectors, particularly the latter two, is vague, but in Communist China it is remarkably sharp. Contrary to conditions prevailing in China before 1949, inland vessels do not carry cargo between coastal ports, and coastal vessels do not provide service between inland ports. Scheduled service on coastal vessels on the lower Yangtze River as far inland as Hankow (Han-k'ou), a distance of 1,125 kilometers, has existed since June 1956, 1/* but the service probably involves cargo between coastal and inland ports and not shipments between inland ports. Thus the operation of coastal vessels on the Yangtze River is merely an extension of coastal service.

Vessels of the Free World predominate in the international seaborne trade of Communist China, having accounted for 86 percent of all foreign shipping tonnage arriving in Chinese ports in 1956. The remaining 14 percent consisted of ships under Soviet, Polish, and Czechoslovak registry. 2/ Before 1 November 1957, Communist China had no scheduled international shipping under its own flag. At that time the Chinese Communists established scheduled service connecting Canton, Hong Kong, and Haiphong, 3/ and it is possible that eventually such service may be extended to other ports of Southeast Asia.

Although there has been an impressive increase in coastal traffic since 1950, the general development of coastal shipping has not been stressed by the Chinese Communists. The industrial program of Communist

50X1

China required the expansion of the capacity of inland transport, and there has been a reorientation of international trade away from the sea to land connections with other countries of the Bloc. Moreover, the limited facilities for coastal shipping available immediately after 1949, and the possibility of interference from the Chinese Nationalists prevented coastal shipping from serving the new transportation requirement as effectively as interior land transport facilities.

In terms of tons originated, coastal shipping is outranked by all forms of modern transport except air transport. Both air and highway transport rank lower than coastal shipping in ton-kilometer performance. In 1950, coastal shipping accounted for only 0.828 million tons originated, which is 0.7 percent of total tons originated by all forms of modern transport. Ton-kilometer performance in that year was 0.822 billion, or 1.9 percent of total ton-kilometers. In 1957, tons originated by coastal shipping were approximately 13.9 million and ton-kilometers 11.1 billion, or about 3.2 percent and 6.7 percent, respectively, of the totals for the year. Compared with other forms of modern transport, therefore, the proportion of the total traffic load in Communist China carried by coastal shipping is relatively small. Yet the traffic carried by coastal shipping is very important. The railroads, the major carrier in China and the form of land transport best able to carry bulk freight, already are working at near capacity. If coastal shipping suddenly were to be removed, the railroads would have to transport most of that traffic in addition to their regular load, a difficult undertaking under present conditions.

The Minister of Communications in Communist China has administered coastal shipping through the Central Maritime Navigation Administration and its regional offices at Dairen (Ta-lien), Shanghai, and Canton. 4/ The bureaus at Dairen and Shanghai probably were amalgamated on 1 September 1956 into the new East China District Maritime Transportation Control Bureau, 5/ which has jurisdiction over all coastal shipping north of the Taiwan Strait. 6/ The Canton bureau presumably has control over the coastal shipping south of the Taiwan Strait.*

The private shipping companies that existed under the Chinese Nationalists and in the early years of the Communist administration apparently have disappeared from the organizational structure of coastal shipping under the First Five Year Plan (1953-57). The term private steamship companies is used in the water rate regulations as late as 1956, 7/ but probably refers only to the few remaining state-private companies which are jointly operated. Such companies are

* Except as noted, the terms north coast and south coast are used in this report to designate the regions north and south, respectively, of the Taiwan Strait.

managed by the Ministry of Communications, the former company officials being retained merely as figureheads. Almost all of the junks operating on inland waterways have been combined into cooperatives, and it is reasonable to assume that coastal junks have been similarly organized.

II. Coastal Shipping Routes and Ports.

A. Restoration of Services by the Communists.

Coastal shipping operations were restored quickly after the Chinese Communists gained final control of the mainland. In December 1952 the Communists announced that 36 shipping routes totaling 10,000 nautical miles already were open for service in the region north from Foochow (Fu-chou) and in the region south of Taiwan. 8/

Under the First Five Year Plan (1953-57), the Chinese Communists expanded and improved the service without materially changing the system of shipping routes existing in 1952. A Shanghai-Dairen express passenger service 9/ and combined coastal-river service extending up the Yangtze River as far as Hankow have been inaugurated 10/ and represent the most significant new services.

B. Present Network.

1. Total Network and Major Routes.

Canton, Shanghai, and Dairen are the chief centers of an extensive system of shipping routes which connect 90 ports. 11/ As late as 30 June 1957 the Chinese Communists still reported only 36 coastal shipping routes. 12/ These routes are believed to be the same as those which were considered to be major routes existing as of 1 January 1956, which are shown in Table 1.* The ports involved are shown on the accompanying map.**

A few areas of the coastline stand out as not being on major shipping routes as late as June 1957. These areas are as follows: (a) the Liaoning coast eastward from Dairen to An-tung on the North Korean border, (b) that part of the Gulf of Chihli (Po Hai) north of a line connecting Dairen and Ch'in-huang-tao, (c) the region of the Taiwan

* Table 1 follows on p. 6. The announcement of June 1957 gave the total length of the 36 routes as 20,000 nautical miles. It is believed that this figure represents round-trip distances because a figure of 10,000 nautical miles was given in the announcement of December 1952, and the distances indicated in Table 1 add to approximately 10,000 miles.

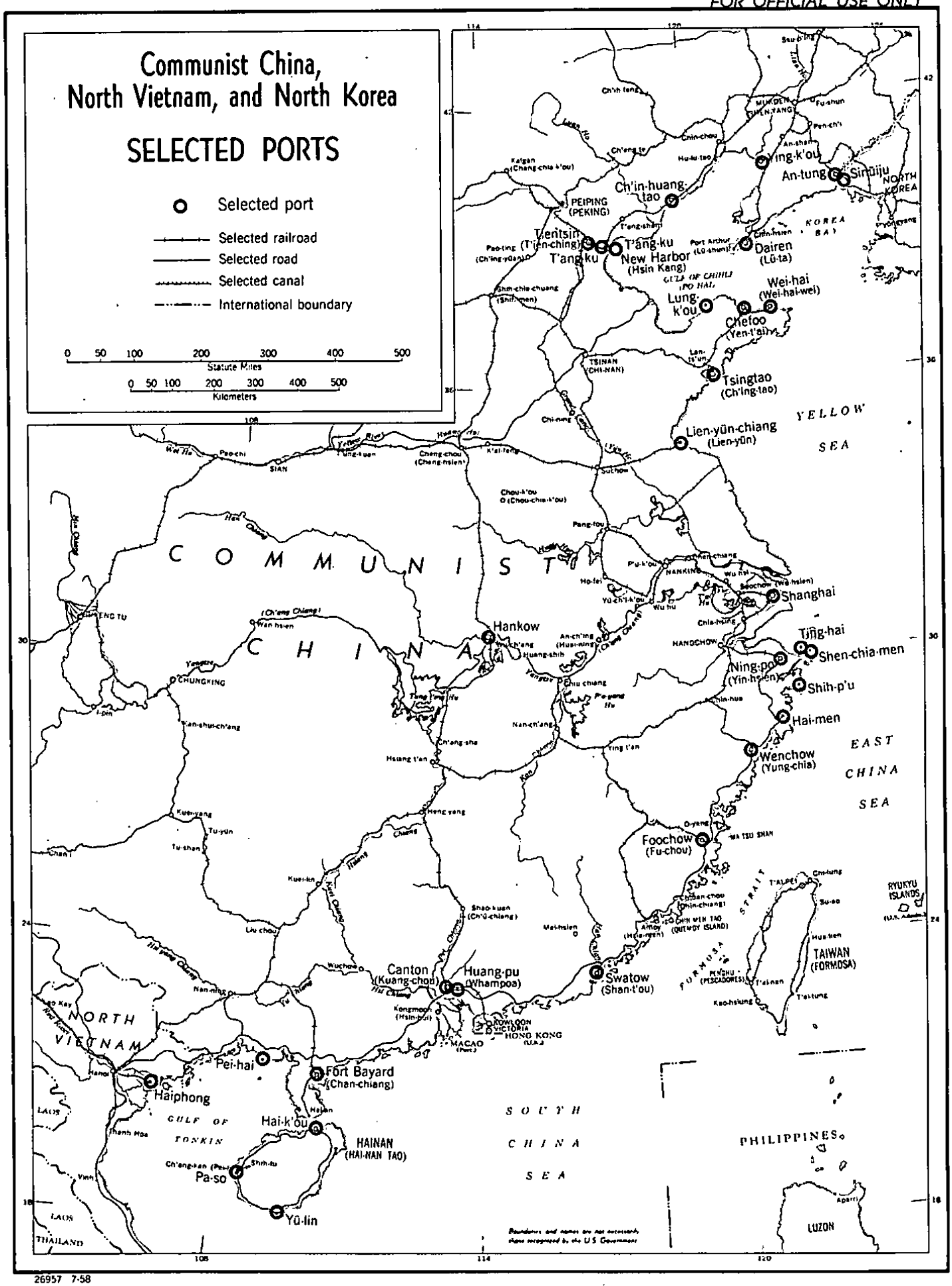
** Following p. 6.

Table 1

Major Coastal Shipping Routes in Communist China a/
1 January 1956

Route	Length (Nautical Miles)
North of the Taiwan Strait	
Dairen-Tientsin (T'ien-ching)	277
Dairen-Lungkow (Lung-k'ou)	127
Dairen-Chefoo (Yen-t'ai)	89
Dairen-Tsingtao (Ch'ing-tao)	274
Dairen-Shanghai	563
Ch'in-huang-tao - Lungkow (Lung-k'ou)	143
Ch'in-huang-tao - Chefoo	175
Ch'in-huang-tao - Wei-hai-wei	214
Ch'in-huang-tao - Shanghai	688
Tientsin-Lungkow	186
Tientsin-Chefoo	238
Tientsin-Tsingtao	461
Tientsin-Shanghai	752
T'ang-ku - Shanghai	721
Hsin-k'ang (New Harbor) - Shanghai	714
Chefoo-Tsingtao	238
Chefoo-Shanghai	524
Tsingtao-Shanghai	404
Lien-yun chiang - Shanghai	383
Shanghai - Shen-chia-men b/	141
Shanghai - Ting-hai c/	135
Shanghai-Ningpo (Yin-hsien) c/	140
Shanghai - Hai-men c/	243
Shanghai - Shih-p'u b/	186
Shanghai-Wenchow (Yung-chia) c/	320
Shanghai-Foochow c/	472
Total	8,808
South of the Taiwan Strait	
Swatow (Shan-t'ou) - Canton (Kuang-chou)	293
Canton - Hong Kong	85
Canton - Chan-chiang (Fort Bayard)	301
Canton-Haikow (Hai-k'ou)	360
Canton - Yu-lin	480
Total	1,519
Grand total for the 36 routes	10,327

a. 13/
b. Major route for small steamships only.
c. Major route for large and small steamships. The Chinese Communists apparently counted this route twice to reach a total of 36, but the distance only once to derive the figure of 10,000 miles.



26957 7-58

Strait between Foochow and Swatow, and (d) the Kwangtung coast west of the Luichow Peninsula (Lei-chou Pan-tao). Except for the region of the Taiwan Strait, which is served well by British shipping, there are no ports of consequence in these areas.

2. Minor Routes and Service.

Little is known of the minor shipping routes served by small coastal steamships, tugs, and junks. There are possibly more than 100,000 small vessels, predominantly junks, and reportedly more than 60 secondary ports along the south coast alone, each of which handles 30,000 tons or more of cargo annually. 14/ Passenger and freight service on both a scheduled and nonscheduled basis probably is involved.

There is also minor service over major routes: that is, tugs, small steamships, and junks sail over the same routes as large steamships but provide service to secondary ports along the way not served by the large vessels. The total extent of the minor service cannot be determined.

3. Future Routes.

The pattern of coastal shipping routes is expected to remain stable in the near future. There will be a change in the network of domestic routes if the situation in the Taiwan Strait is settled and Chinese Communist vessels can resume service to and through that area once again, although British vessels still may be employed.

C. Investment.

1. Total Investment Program.

Data on investment in water transport in Communist China are much more scarce than data on land transport. Because absolute figures are almost nonexistent, it is necessary to use vague announcements of percentages and to make inferences from indirect evidence.

Early in 1950, Communist China reportedly decided to emphasize the development of railroads rather than the recovery of highway and water transport. 15/ During the first 3 years of the First Five Year Plan (1953-57), railroads accounted for two-thirds, and highways accounted for 19.3 percent of the total investment in construction in the fields of communications and transportation. 16/ Presumably the remaining 14 percent (about 600 million to 700 million yuan*) was

* About US $244 million to $284 million on the basis of the rate of 2.46 yuan to US $1. This rate of exchange is based on the yuan-sterling rate for telegraphic transfers, which is /footnote continued on p. 8/

divided between water transport and communications construction. How the volume of investment was divided between water transport and communications and between inland and coastal shipping is not clear.* In the First Five Year Plan there was only this vague statement: "Within the 5-year period, the major obligation in the realm of waterway transportation will be to develop inland river transportation, with emphasis on the Yangtze River, and at the same time to develop appropriately ocean transportation." 17/ The implication is clear that water transport in general, and probably coastal transport in particular, was to receive a relatively minor amount of investment in the First Five Year Plan.

Even the small amount originally scheduled may not have been invested in water transport, because at the end of 1956 only about 35 percent of the amount allocated for capital construction of water transport under the First Five Year Plan had been invested. The reasons given for the poor showing are inadequate planning and a general policy in capital construction of neglecting long-range planning in favor of filling immediate needs.** 18/ The Chinese Communists have recognized the inherent weaknesses in their past attitude toward investment, and now that a measure of stability has been reached, they may be expected to emphasize more the long-range, broad aspects of planning.

2. Investment in New Ports.

The Chinese Communists have recognized that one of the weaknesses in the investment program is the great preoccupation with the development of new ports (actually old ports being extensively expanded and rehabilitated). Reportedly such ports have accounted for about 51 percent of all funds invested in ports during 1953-56. 19/ Coastal ports have received the primary attention, and the only new inland port developed in this period is Yu-ch'i-k'ou on the Yangtze. Hsin-k'ang***

---

arbitrarily established and bears no relationship to domestic price levels.

* At the time of this announcement, civil aviation was not administered by the Ministry of Communications and thus probably is not involved.

** Although not clarified further by the Chinese Communists, the latter terms probably refer to individual ports or portions of rivers which need immediate assistance to achieve the annual plan.

*** The port is immediately north of the mouth of the Hai River and northeast of the small port of Ta-ku. The port is physically nearest Ta-ku and is sometimes referred to as Ta-ku Hsin-k'ang; however, it is on the same side of the river as the minor port of T'ang-ku, several kilometers upstream, and accordingly is sometimes called T'ang-ku Hsin-k'ang. Because Hsin-k'ang is physically separated from both these ports, the unmodified Hsin-k'ang is used here.

(New Harbor) and Chan-chiang (Fort Bayard) are the new coastal ports which have received primary attention, although Whampoa (Huang-pu) has been expanded considerably. Hsin-k'ang was started in 1939 by the Japanese during their occupation to provide a new deepwater port for Tientsin which would bypass the extensive sand bar at Ta-ku, and the Chinese Communists completed work in October 1952. 20/

Chan-chiang,* on the east side of the Luichow Peninsula, has a large, deep, well-protected natural harbor and is probably the best natural harbor in South China other than Amoy (Hsia-men). Connection by rail to the rest of the transportation network on the mainland has greatly increased the potential significance of the port. Expansion of this port began early in 1955, 21/ and the first stage of construction in the port was finished during the first 6 months of 1957, 22/ giving the port a maximum cargo-handling capacity of 1.6 million tons annually. Construction of the harbor is scheduled to continue into the Third Five Year Plan (1963-67), 23/ with the capacity to handle 4.6 million tons of cargo a year as the ultimate goal. 24/

3. Investment in Improvement of Ports.

In addition to the work on the new ports, the Chinese Communists have cleared ports of war damage, and there has been some rehabilitation and expansion. 25/ One of the principal means of improving facilities has been the increased use of machinery for handling cargo. This program accounted for about 23 percent of the total investment in water transport during 1953-56, 26/ and the coastal ports probably received a greater share of investment. In 1954, nearly 10 million yuan (about US $4 million) were allocated to machinery for handling cargo. 27/ The Communists claim that in 1955 the 6 major seaports** used 2.8 times as many loading and unloading machines as in 1953. 28/ In 1956, about one-third of the cargoes passing through the 6 major seaports were worked with machinery. 29/

A few examples will serve to illustrate the progress made in some of the ports and the generally uneven development of mechanization in the ports. Dairen claims that 63 percent of the work was mechanized in 1957, compared with 44 percent in 1952. 30/ Shanghai planned to be able to handle half of its cargo mechanically in 1957 compared with only 20 percent in 1955. 31/ At Hsin-k'ang the proportion of the total cargo tonnage handled mechanically had grown from about 20 percent in July 1954

* Chan-chiang has been known under several other names such as Kuang-chou Wan (Canton Bay), Hsi-ying (one of the small villages or ports of the urban area in the port complex), and Fort Bayard (when the port was a French concession). Another popular alternate name is Tsamkong.
** Dairen, Ch'in-huang-tao, Tientsin, Tsingtao, Shanghai, and Canton.

to more than 70 percent by October 1956. 32/ The same proportion reportedly applied to Whampoa in December 1956. 33/ Chan-chiang is possibly the most mechanized port in Communist China, and more equipment is to be installed as construction proceeds. 34/

4. Investment in 1957 and in the Second Five Year Plan.

Investment in ports in 1957 undoubtedly followed much the same pattern as in previous years. The only project specified for the north coast was the expansion of five small ports in the Shantung Peninsula. 35/ On the south coast, 1 million Hong Kong dollars* were spent to renovate the old China Merchants Steam Navigation Company wharf in Hong Kong, which is now owned by the Chinese Communists and presumably being used by the new service to Hong Kong. 36/

Plans for investment under the Second Five Year Plan (1958-62) have not been announced but will probably be about the same as under the First Five Year Plan, although less attention will be given to new ports. The principal ports in Communist China seem to be now restored to their prewar condition or improved and are being used at less than capacity. 37/ Hence some increase in traffic can be handled without additional immediate investment.

III. Fleet Inventory.

A. Modern Sector.

1. Growth.

When the Chinese Communists gained control of the mainland, they acquired a very small fleet. The size of the fleet controlled by the Nationalists at the time of the evacuation to Taiwan is estimated at 267 vessels of approximately 842,100 gross register tons (GRT).** 38/ The fleet controlled by the Chinese Communists in mid-1950 is estimated to have consisted of only 41 vessels totaling 102,867 GRT, 39/ and at the end of 1952, of 60 vessels totaling 146,138 GRT. The Chinese Communists have announced that during the first 4 years of the First Five Year Plan the tonnage of seagoing vessels increased 17 percent, 40/ thus indicating a fleet of about 170,982 GRT at the end of 1956. It is estimated that there were about 72 vessels at that time. During 1957 a substantial number of vessels were added to the fleet, and by the end of 1957 there may have been as many as 89 vessels of about 205,316 GRT.

* About US $175,000 at the official rate of exchange, 5.7 Hong Kong dollars to US $1.

** Vessels of 1,000 GRT and above. Unless otherwise indicated, this same limitation applies to all the estimates of the size of the fleet.

It is very difficult to compare the fleet of Communist China with that of other countries. Elsewhere there is not the sharp distinction between domestic coastal shipping and overseas maritime shipping found in China. In other countries the same companies and vessels often engage in both trades. The estimated coastal and near-seas fleet of India, which contains 83 vessels totaling 247,000 GRT, is almost the same as the Chinese coastal fleet of 89 vessels totaling 205,316 GRT, although the total Indian fleet is almost three times the size of the Chinese coastal fleet.* Within the Sino-Soviet Bloc, only the Soviet and Polish fleets exceed that of China. The Soviet fleet engages in all types of shipping, whereas the Polish fleet is primarily maritime.

The Chinese Communists never have announced a plan for total tonnage of the coastal fleet under the Second Five Year Plan (1958-62). An indication of goals under the plan is reflected in plans for the Chiang-nan yard in Shanghai, 42/ which is to build 1 vessel of 10,000 deadweight tons (DWT) (about 6,000 GRT), "several" coastal freighters of 8,550 DWT (about 5,000 GRT), "several" ore carriers of 10,850 DWT (about 6,000 GRT), and a coastal-passenger cargo vessel of 7,300 DWT (about 4,800 GRT). It is possible that as many as 250,000 to 300,000 GRT will be added to the fleet of Communist China by 1962. 43/ Even if such an amount is added, the tonnage of the Chinese Communist fleet in 1962 will be only slightly more than half that of the Chinese Nationalist fleet in 1949.

2. Characteristics.

The coastal fleet of Communist China is rather old, and most of the vessels are small. At the end of 1957 the average age of the vessels was probably about 20 years, and 3 vessels were more than 50 years old. The average size of the vessels in the fleet at the end of 1957, about 2,500 GRT, is not unduly small when compared with coastal vessels of other countries. In fact, the size is probably ideal for China, where most of the ports are small and have shallow channels subject to much silting. Furthermore, it is economical to dispatch small shipments in these small vessels because it is possible to offer more frequent service without incurring excessive losses resulting from less-than-optimum loadings. Even at present the vessels sometimes sail without full cargoes.

The development of land transport in Communist China may be expected to reduce still further the necessity for the coastal fleet to carry general cargo. The expansion of Chinese Communist industry, however,

* At the end of 1957 the Indian fleet consisted of about 134 vessels of 583,000 GRT, of which only about 247,000 GRT, or 42 percent, were engaged in coastal trade and probably trade to bordering countries. 41/

will increase the demand for vessels to carry bulk cargoes such as iron ore, timber, and coal; and the Chinese Communist coastal fleet probably will not have enough bulk cargo space (as opposed to general cargo space) to carry the volume of traffic required. Larger vessels with special features to facilitate the use of mechanical loading and unloading equipment for bulk cargoes will be needed.

Indications of such a trend came as early as 1954, when timber was transported on large rafts pulled by tugs because of the shortage of bulk cargo space. 44/ Either the shortage was not serious or it was overcome by the charter of foreign vessels,* because there has been no significant development of transportation by tug and raft or tug and barge. Plans for domestic construction of ore carriers and other bulk cargo vessels under the Second Five Year Plan (1958-62) indicate that the Chinese Communists are preparing to cope with the problem of bulk cargo space.

Communist China is also known to have a fleet of modern steel vessels of less than 1,000 GRT. From the information available it is impossible to separate the number of such vessels from the number of junks. Consequently, no separate estimate of the number and tonnage of this sector of the modern coastal fleet can be made.

3. Foreign Vessels in Domestic Shipping.

The operation of foreign vessels between Chinese ports has long been a characteristic of the coastal service. Before World War II, foreign vessels operated extensively along the China coast and even on the inland waterways. Following World War II, while the Chinese Nationalists still controlled the mainland, the activities of foreign vessels were sharply curtailed. Cabotage** was established along the coastal shipping routes as well as on the inland waterways. Even some of the former treaty ports were closed to foreign trade movements in foreign vessels. 46/

One of the chief reasons for resuming the use of foreign vessels under the Chinese Communists was to thwart interference by the Chinese Nationalists with coastal shipping. The contribution of foreign vessels has been significant, inasmuch as regions of the Taiwan Strait and south China have been unusually dependent on water transport because of the inadequate facilities for land transport. The new facilities for

* The Soviet vessels operating in the Chinese Communist coastal trade in 1956 and 1957 transported such bulk cargoes as salt, iron ore, and coal. 45/

** The term cabotage is used in the US and in most foreign countries to describe the practice of limiting domestic traffic to vessels registered under the flag of the country involved.

land transport which have been built by the Chinese Communists have reduced the significance of water transport somewhat, but water transport is still very important to the region.

A second reason for the use of foreign vessels may have been the small size of the fleet available in the early years of the Communist regime, although there are indications that the Chinese Communist fleet generally had been able to handle the volume of strictly domestic cargo before mid-1956. Indeed, although there probably was not enough cargo to utilize all the vessels efficiently over the entire year, the fleet probably was unable to handle the cargo to be moved during peak periods. The Chinese Communists have admitted that the fleet was inadequate during the second half of 1956 and again in 1957. 47/

Among other benefits, the use of foreign vessels enabled the Chinese Communists to invest far less in their fleet. Steel which might have been used for shipbuilding has been freed for other uses, such as the construction of railroads. Finally, the Chinese Communists would have been hard pressed to provide enough seamen, particularly trained officers, for additional vessels. Had the Chinese been forced to man such vessels, there undoubtedly would have been losses of cargo and possibly losses of vessels as well.

British vessels already were engaged in Chinese coastal shipping when the Communists came to power. The vessels now involved in such shipping are believed to be under charter to the Chinese Communists, and some of them may be beneficially owned by the Communists. The British vessels and other foreign vessels not belonging to the Sino-Soviet Bloc have provided service from south China to Swatow and other ports in the region of the Taiwan Strait, also through the Strait to Shanghai and other ports in north China.

For the past few years, Soviet vessels have operated in the Chinese Communist coastal shipping service during the winter months. In the second half of 1956 and in 1957, there was an increase in the use of Soviet vessels but no corresponding increase in the use of British vessels. This development may reflect an increased Soviet ability to provide vessels and a Chinese preference for vessels from countries of the Sino-Soviet Bloc, when available, except in the region of the Taiwan Strait. If so, the Chinese probably are less dependent on British vessels than heretofore.

A recent article indicated that chartered foreign vessels carried 1 million tons* of cargo in the coastal shipping of Communist

* The article claimed that the figure applied only to the second half of the year, and it is known that the inadequacy of the fleet was most serious at that time. It is also known /footnote continued on p. 14/

China in 1956 and 1.6 million tons in 1957. 48/ On the basis of this and other information, 49/ it is estimated that British vessels carried approximately 500,000 tons in 1956 and again in 1957. The tonnage carried by Soviet vessels, which also is estimated at 500,000 tons in 1956, apparently increased to 1.1 million tons in 1957.

B. Primitive Sector.

Information about the coastal junk fleet is very sparse and fragmentary. It is estimated tentatively that the coastal junk fleet (possibly including modern vessels of less than 1,000 GRT) may exceed 100,000 units with a total gross register tonnage of at least 1.6 million tons. 50/ There is no indication of the number that are motorized. The coastal junk fleet numbers only about one-third the estimated number of the inland junk fleet, although the total tonnage of all coastal junks is probably nearer to one-half the total tonnage of the inland fleet because of the larger average size of the coastal junks. The size of the coastal junk varies considerably, and there is no clear or consistent relationship between regions and types or sizes of junks.*

In spite of their slow speed, junks do make voyages of considerable distance along the coast. The number and ton-kilometer performance of such voyages, however, are insignificant compared with the local services performed. The use of junks for long voyages undoubtedly has declined with the growth of the modern coastal fleet and with the increasing requirements for bulk cargoes of Chinese Communist industry. Local service and feeder traffic, however, probably will be retained by junks for a long time. If modern vessels, even small ones, were to take over the service, large investment in the fleet and improved facilities in the small ports would be required. Furthermore, abandonment of the junk fleet would add an additional burden on the supply of fuel. Even at present, shortages of fuel have become serious for water transport in some regions. 52/

There is no indication that the Chinese Communists are planning a substantial increase in the size of the coastal junk fleet or that

---

that British vessels operated throughout the year, and it is not believed that the shortage in 1956 was more severe than in 1957. The figure for 1957 presumably applies to the whole year. The similarity between the figures for the 2 years leads to the conclusion that the figure for 1956 also actually applies to the entire year.

* The Pechili (Pe-chih-li) Trader junks, which operate between Yingkow (Ying-k'ou) and ports as far south as the Chekiang coast, have a 280- to 300-ton carrying capacity (about 180 to 200 GRT), whereas the Chefoo (Yen-t'ai) Trader, which operates chiefly in the Gulf of Chihli, has a capacity of only 56 to 70 tons (about 40 to 50 GRT). 51/

junks will carry a larger proportion of coastal traffic. The expansion of the Chinese economy probably will result in an absolute increase in the size of the coastal junk fleet and the traffic it carries but no increase in the relative importance of this fleet.

C. Investment.

Although the Chinese Communists have released no specific data, the significant increase in the tonnage of the coastal fleet indicates that it has received considerable attention in the program for investment in coastal shipping under the First Five Year Plan (1953-57).

Most of the increase in the Chinese Communist coastal fleet has resulted from purchases of new construction abroad. During 1955-57, Finland provided 6 cargo vessels totaling about 14,000 GRT 53/ which have gone under the Chinese flag. Hungary has provided 2 ships of 1,194 GRT each, 54/ and Poland has supplied China with about 12 vessels since 1955. [redacted] 50X1 50X1

Chinese Communist investment in the purchase of second-hand vessels from other countries has been very small.* Since 1951 the only second-hand vessel known to have been purchased abroad and put under the Chinese flag is a small Finnish vessel which was acquired in 1954. 56/

The investment in the shipbuilding industry of Communist China has been concentrated in the expansion of facilities for construction, and the USSR contributed materially to the improvement of the shipyard at Dairen during the period of joint operation which ended in 1954. Planned investment in facilities for the shipyard at Dairen in 1957 was cut by more than 50 percent, but one of the main projects retained was the construction of 2 slipways capable of handling vessels of more than 10,000 DWT (about 6,000 GRT) in size. 57/ Undoubtedly this project is related to plans to construct several vessels of 10,000 DWT under the Second Five Year Plan (1958-62). 58/ A new 2-year project for expanding the shipyard at Dairen has been announced, 59/ possibly in anticipation of the construction of cargo vessels of 13,000 DWT (about 8,000 GRT). 60/

The shipyard at Canton also is being expanded into the largest and best equipped yard in south China. It will be able to repair vessels of up to 5,000 DWT and to construct vessels of up to 1,000 DWT. 61/ Planned investment in the shipyards at Shanghai is not known.

* The 12 ships which defected to the Communists in 1951 apparently were acquired at little or no cost to the Communists.

By contrast, there has been little investment to date in the actual construction of coastal vessels in Communist China. Only 2 such vessels of more than 1,000 GRT are known to have been built and put into operation under the Communists. It is reported that each of these vessels cost more than 5 million yuan (about US $2 million).* 62/

Another form of investment has been the establishment of salvage companies to clear sunken vessels from ports and navigation channels and to make available for use those vessels which were reparable. 63/ Between 1951 and late 1957, about 166 vessels of all sizes, totaling more than 125,000 DWT, were raised. 64/ Some of the vessels salvaged have been repaired and returned to service, and some, although scrapped, have provided usable materials and machinery for other vessels. Most of the salvaged vessels have been placed into service on the Yangtze River, but seven have been put into service between Shanghai and Dairen. 65/

During 1958-62, Communist China is expected to devote more investment to building up the fleet by domestic construction. Evidences of such a trend include the plea for greater investment in shipbuilding made at the National Peoples Congress in July 1957, 66/ the nature of construction scheduled under the Second Five Year Plan, and the statement made at the National Peoples Congress in February 1958 that Chinese shipbuilding could catch up with British shipbuilding within 15 years or possibly sooner. 67/ Although vague, this last statement implies interest in an ambitious, long-term program of domestic shipbuilding.

The Chinese Communists appear to be interested in developing their own shipbuilding capabilities regardless of the costs involved. There have been no known attempts to take advantage of the current slump in world shipping to acquire vessels at lower costs while the market is depressed. The excessive costs of shipbuilding in Communist China are indicated by a statement made at the National Peoples Congress in February 1958. At that time it was said that the cost of constructing a freighter of 10,000 DWT in China would be around 12 million yuan (about US $5 million) compared with 775,000 pounds sterling (US $2,170,000**) for a vessel of 9,500 DWT built in the UK. 68/

---

* Two other vessels launched at Dairen have not been completed as yet.
** At US $2.80 to UK £1, the official rate of exchange.

IV. Performance.

A. Freight Traffic.

The improvement in performance of the Chinese Communist coastal fleet has been impressive. As shown in Table 2,* the performance of modern coastal shipping in terms of ton-kilometers in 1956 was more than 10 times that in 1950. The increase in the size of the fleet, the improved utilization of vessels, the expansion of the Chinese economy, and the reduction of water freight rates are factors contributing to the improvement in performance. Annual goals have been fulfilled or exceeded although sometimes by only small margins. The goals of the First Five Year Plan (1953-57) were exceeded, although water transport (both coastal and inland) was the only form of modern transport which did not fulfill the goal for 1957 in 1956. At present the greatest single hindrance to the continued improvement in the performance of coastal shipping is the limited ability of land transport to move goods away from the port warehouses quickly. This problem, however, is characteristic of water transport everywhere.

The commodities transported by the modern coastal fleet are coal, petroleum, iron and steel, manufactured products, lumber, grain, salt, mineral construction materials, and ores. 71/ Junks and other small craft are engaged primarily in transporting construction materials, foodstuffs, and native products.

Along the north coast the tonnage of southbound cargo traffic (toward Shanghai) has exceeded the tonnage of northbound cargo traffic, although in 1956 the volumes became about equal. 72/ There was also a modification of the flow pattern on the south coast in 1956. Shipments along the "west line" (apparently that part of the traffic pattern extending westward from Canton) were 70-percent westbound and 30-percent eastbound in 1955 but shifted to 60-percent eastbound and 40-percent westbound in 1956 and increased greatly in volume. 73/ On the "east line" (toward Swatow) the ratio of eastbound shipments declined although no details are given. 74/ Apparently there was also a decline in the total traffic moving between Swatow and the area around Canton and Hong Kong because the ratio of utilization of the Chinese Communist vessels reportedly declined from that which prevailed in 1955. 75/ Moreover, British vessels, which formerly had engaged in a lucrative trade between these points, were reported to be doing only a "hand-to-mouth" business. 76/ The decrease in volume of eastbound shipments from Canton was offset by the increase in westbound shipments. The decline in the rate of utilization of the Chinese Communist vessels resulted in part from a decrease in the amount of military cargoes shipped to Swatow. 77/ This decrease

* Table 2 follows on p. 18.

Table 2

Estimated Performance of Modern Coastal Shipping in Communist China a/
1950-57

Year	Amount: Billion Ton-Kilometers	Amount: Percent of Total Modern Transport b/	Volume Originated: Million Tons	Volume Originated: Percent of Total Modern Transport b/	Average Length of Haul (Kilometers)
1950	0.822	1.9	0.828	0.7	993
1951	3.01	5.2	3.58	2.7	841
1952	5.00	7.2	5.76	3.4	867
1953	4.65	5.2	5.92	2.8	785
1954	8.04	7.2	9.91	3.7	812
1955	8.38	7.0	10.4	3.7	802
1956	8.60	5.9	10.8	2.9	793
1957	11.1 c/	6.7	13.9 d/	3.2	800

a. [redacted] Data have been rounded to three significant figures. Percentages are derived from unrounded figures and do not always agree with the rounded figures shown. 50X1

b. Includes all forms of modern transport except air transport, which is negligible by comparison.

c. From an announcement that ton-kilometers increased 29.2 percent above 1956. 70/

d. Estimated by dividing ton-kilometers by the estimated average length of haul.

in military cargoes probably in turn enabled the Chinese vessels to carry cargoes which had formerly been transported on the British vessels with the resultant "squeeze" on the latter. The decreased need for British vessels probably also played a part in the later termination of the 100-percent bonus paid for voyages to Swatow, although the nominal reason given was that Swatow is now considered a safe port 78/ -- that is, ships visiting Swatow were no longer subject to serious interference from the Chinese Nationalists. The general slump in the shipping market in Southeast Asia, however, provided little enticement elsewhere for the British vessels, and they remained in the trade.

B. Passenger Traffic.

Statistical coverage of passenger traffic for water transport is considerably less extensive than that for freight traffic. There are no specific data on the passenger traffic handled by coastal shipping since 1954. In that year the number of passengers amounted to 1.24 million and the number of passenger-kilometers to 333 million. By contrast, in 1954 the railroads of Communist China carried about 218 million passengers, and the volume of railroad traffic amounted to 29.1 billion passenger-kilometers.

C. Planned Development of Traffic.

The Chinese Communists have given no indication of their plans for coastal shipping under the Second Five Year Plan (1958-62). Present trends indicate that by 1962 the performance of coastal shipping, in terms of both tons originated and ton-kilometers, will increase by about 100 percent compared with that in 1956. The anticipated increase in operating efficiency, however, will not require the doubling of the size of the fleet. In spite of the increase in traffic, the relative importance of coastal shipping to modern transportation of all types in 1962 is expected to remain at about the level of 1957.

V. Operating Efficiency.

Specific information concerning the operating efficiency of the Chinese Communist merchant fleet is very limited. Most of the information available concerns the years before 1953, when coastal operations were just getting under way, and hence does not permit valid comparison with other fleets. [redacted] information on efficiency of the Chinese Communist coastal fleet gives the impression that efficiency in general increased between 1950 and 1955. The Chinese have indicated that in 1956 there was a decrease in efficiency. 79/ The loss was undoubtedly slight, however, and was probably more than regained in 1957. 50X1

The increase in mechanized equipment for handling cargo in ports undoubtedly has raised the efficiency of labor. In 1956, however, the planned increase of 29.34 percent in the efficiency of stevedores in coastal ports was not attained. 80/ Some of the reasons for the failure to meet the plan are that goals were set too high and wages were too low. The stevedores earned no more by working than they did by accepting the subsidy paid them when they were unemployed, and absenteeism therefore was high. 81/

APPENDIX A

METHODOLOGY

1. Size of the Fleet.

As of about June 1950 the merchant marine fleet of Communist China was said to consist of 41 ships of 1,000 GRT or more totaling 102,867 GRT. 82/ It is believed that this figure refers to seagoing dry-cargo vessels only. The 7 small tankers totaling 8,540 GRT were in Chinese waters but apparently either were not operating or were operating on the Yangtze River. In 1951, 12 cargo vessels totaling 34,731 GRT were added to the fleet, 83/ bringing the grand total to 60 vessels aggregating about 146,138 GRT. There were no known changes in the size of the fleet in 1952. The only usable information on the increase in the fleet since 1952 is the statement that the tonnage of seagoing vessels in 1956 was 17 percent above that in 1952. 84/ Such an increase would indicate a tonnage of about 170,982 GRT in 1956. It is estimated that there were 72 vessels.

The Chinese Communists use 5 major series of names to designate their modern vessels, and each vessel bears a number within 1 of the series. The estimate of the size of the coastal fleet at the end of 1957 was made on the basis of a recent listing of the ships and their characteristics, 85/ supplemented by subsequent Chinese announcements [redacted] Only one of the series of ships (the Ho P'ing series) showed a significant increase. [redacted] 50X1 50X1

it is possible to estimate the Chinese Communist coastal fleet at the end of 1957 as 89 vessels totaling 205,316 GRT.

2. Passenger Traffic.

According to the First Five Year Plan, coastal shipping was to transport 1.47 million passengers during 1957, and it was indicated that this figure represented an increase of 110 percent above the figure for 1952. 86/ It was indicated also that the figure of 438.92 million passenger-kilometers* in 1957 represented an increase of 137 percent over the figure

* In the First Five Year Plan the figure for ton-kilometers of freight was found to be in terms of ton - nautical miles. Because the Chinese Communists generally use nautical miles /footnote continued on p. 22/

for 1952. From these data the figures of 700,000 passengers and 185 million passenger-kilometers for 1952 were obtained. Later index numbers of 177 (1952 = 100) for passengers and 180 (1952 = 100) for passenger-kilometers were published 87/ which provide the figures of 1.24 million passengers and 333 million passenger-kilometers for 1954.

Passenger-kilometers in railroad traffic in 1954 were determined from the statement that passenger-kilometers in that year were 145 percent of the 1952 figure. 88/ The figure for 1952 (20.041 billion passenger-kilometers) was in turn derived from information in the First Five Year Plan (1953-57). 89/ The estimate of the number of passengers was derived by dividing the figure for passenger-kilometers (29.059 billion) by an estimated average length of haul of 133 km.

---

for coastal distances and the figure for freight had to be converted, it was assumed that the figure for passenger-kilometers also had to be converted. The factor of 1.852 kilometers per nautical mile was used in the conversion.

Next 4 Page(s) In Document Denied

Declassified in Part - Sanitized Copy Approved for Release 2013/08/26 :
CIA-RDP79R01141A001200070002-8